



**January 25, 2015**

### **Current Situation at Fukushima Daiichi Power Plant**

It has been almost four years now since the devastating tsunami that hit Fukushima, Japan caused the worst nuclear accident since Chernobyl. While the situation still remains guarded, progress continues toward decommissioning the stricken power plant; however, it will likely be decades before completion of the project. At the present time, work is continuing on: maintaining stabilization of the reactor units; performing nitrogen injection to control the hydrogen concentration; removal of radioactive contaminants; and monitoring water temperature, water levels, and on-site radiation dose. One milestone that has been reached is the removal of fuel rods from Unit 4 (completed on 12/22/14). News releases and information about the facility's decommissioning plans can be found at Tokyo Electric Power Company's (TEPCO) website at:

<http://www.tepco.co.jp/en/notice/index-e.html>

<http://www.tepco.co.jp/en/decommision/index-e.html>

### **Seafood and Food Safety**

The Hawaii Department of Health (HDOH) has been monitoring the situation at the Fukushima Daiichi Power Plant, and confers with the U.S. Food and Drug Administration (FDA) and other state radiation programs regarding radiation safety in food and seafood products. To date, FDA has no evidence that radionuclides from the Fukushima incident are present in the U.S. food supply at levels that would pose a public health concern. This is true for both FDA-regulated food products imported from Japan and U.S. domestic food products, including seafood caught off the coast of the United States.

HDOH personnel have also been participating in quarterly Fukushima Interagency Workgroup conference calls with the FDA and West Coast states to discuss public concerns over food safety and the need for testing of fish and shellfish. Due to their large seafood industry, the State of Alaska decided to collect samples and submit them to the FDA for analyses. Samples of Salmon, Halibut, Pollock, Sablefish and Cod were analyzed, and the results were below detectable limits for Iodine-131, Cesium-134, and Cesium-137. Detailed results can be found on the Alaska Division of Environmental Health webpage here:

<http://dec.alaska.gov/eh/radiation>

## **Seawater Safety and Shoreline Surveys for Radiation and Japan Tsunami Marine Debris (JTMD)**

The HDOH continues to monitor the results of surveys and monitoring performed by TEPCO, as well as review scientific publications and reports from both private and public scientific institutions, to keep abreast of any potential impact on the ocean and sea life. We do not anticipate any public health effect on beachgoers around the Hawaiian Islands, due to the following factors:

- **Water acts as a diluent.** While there may be significant quantities of radioactive material released into the sea near the Fukushima reactor site, the massive amount of water in the Pacific Ocean would rapidly dilute and disperse the materials to negligible levels.
- **Some radioactive isotopes rapidly decay.** For example, the half-life of Iodine-131 (I-131) is about eight days. This means that the activity level of the I-131 isotope drops by half every eight days. Given the length of time since the event, the short-lived radionuclides would have decayed to near background levels and therefore pose no health hazard. Although Cesium isotopes have longer half-lives (Cs-134 has a half-life of about two years, Cs-137 a longer half-life of about 30 years), the radionuclides also undergo biological excretion and do not continue to build up in fish forever.

HDOH continues to perform shoreline surveillance on Oahu, Kauai, Maui and the Big Island as needed, utilizing highly sensitive radiation detection equipment to measure radiation levels on the sand, rocks, and any marine debris that may have washed ashore. Should the need arise, surveillance may be ramped up and performed more frequently. Results of the most recent surveys performed from January – December 2014 were consistent with normal background levels. Normal background radiation levels near the shoreline generally range from 1 to 5 microRoentgens per hour.



*HDOH Staff Performing Shoreline Radiation Surveillance*

## **Samples from Local Milk, Precipitation, and Drinking Water**

\*\*\*Update on Federal Radiation Milk Sampling

As of November 3, 2014, the U.S. Environmental Protection Agency is no longer conducting RadNet milk sampling. The U.S. Food and Drug Administration has the authority for food safety, including monitoring radiation in milk. Learn more about FDA's Total Diet and Radionuclides in Food programs here:

<http://www.fda.gov/Food/FoodScienceResearch/TotalDietStudy/default.htm>  
<http://www.fda.gov/Food/FoodborneIllnessContaminants/ChemicalContaminants/ucm2006907.htm>

Precipitation and drinking water samples continue to be collected following routine sampling protocols. Drinking water samples are collected on a quarterly basis and precipitation samples are collected as rain capture permits. Samples are sent to the EPA laboratory for analysis. Analysis of the data for 2014 continues to show typical fluctuations associated with background radiation. Detailed data and searches can be found at the following EPA website:

[http://iaspub.epa.gov/enviro/erams\\_query\\_v2.simple\\_query](http://iaspub.epa.gov/enviro/erams_query_v2.simple_query)

## **Radiation Air Monitor Shows Normal Background Radiation Levels**

One stationary EPA RadNet air monitoring station in Honolulu continues to measure radiation levels throughout the state. Recent analysis continues to show typical fluctuations associated with background radiation. HDOH continues to work with other Federal, State and County partners to monitor the situation in Japan. The department is prepared to accelerate radiation sampling if the need arises. Near real-time air monitoring data can be found at EPA's website:

<http://epa.gov/radnet/radnet-data/radnet-honolulu-bg.html>

For additional information, please visit our webpage at

<http://health.hawaii.gov/irhb/japan2011/> or contact our radiation staff at (808) 586-4700.